

# TEXAS DEPARTMENT OF INSURANCE

Engineering Services / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104  
Phone No. (512) 322-2212 Fax No. (512) 463-6693

## PRODUCT EVALUATION DR-502

Effective October 1, 2011

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **April 2015**.*

*This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.*

*This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.*

**Mira Premium Series Aluminum Clad Wood Outswing Stationary Door, Impact Resistant,**  
manufactured by

**Ply Gem Windows**  
433 N. Main Street  
Rocky Mount, Virginia 24151-0559  
(800) 999-8400  
[www.plygem.com](http://www.plygem.com)

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

## PRODUCT DESCRIPTION

The Mira aluminum clad outswing stationary door is a wood stationary door. The aluminum clad wood outswing stationary doors evaluated in this report are individual, impact resistant doors. This product evaluation report is for aluminum clad wood outswing stationary doors based on the following tested constructions:

### General Description:

System	Description	Label Rating
1	Mira Premium Series Aluminum Clad Wood Outswing Stationary Doors; (OO)	FD-LC50 75 x 98

### Product Dimensions:

System	Overall Size	Fixed Panel Size	Fixed Panel Daylight Opening Size
1	75 $\frac{1}{4}$ " x 98 $\frac{1}{16}$ "	Two: 36" x 96"	25" x 82 $\frac{1}{8}$ "

### Glazing Description:

System	Glass Construction <sup>1</sup>	Glazing Method <sup>2</sup>
1	IG-1	GM-1

Note: <sup>1</sup> See the "Glass Construction Key" for the glazing construction.

<sup>2</sup> See the "Glazing Method Key" for the glazing method description.

**Glass Construction Key:**

IG-1: Both panels contain a sealed insulating glass unit. The sealed insulating glass units are comprised a double strength ( $\frac{1}{8}$ " ) fully tempered glass lite and a laminated glass unit separated by a desiccant-filled U-shaped spacer system. The laminated glass unit is comprised of two double strength ( $\frac{1}{8}$ " ) annealed glass lites with a 0.090" thick Solutia PVB interlayer. The glass thickness used in the insulating glass unit of the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

**Glazing Method Key:**

GM-1: The insulating glass units are wet glazed on the interior. Wood glazing beads secure the insulating glass units in place.

**Frame Construction:** The frame head, sill, and side jambs consist of wood members. The aluminum sloped sill is secured to the side jambs using screws.

**Aluminum Cladding:** The exterior extruded aluminum cladding corners are miter cut and secured to each other with an injection molded corner key and screws. The aluminum cladding is secured to the wood profiles with staples.

**Panel Construction:** The panel stiles and rails consist of wood members.

**Aluminum Cladding:** The exterior extruded aluminum cladding corners are miter cut and secured to each other with an injection molded corner key and screws. The aluminum cladding is secured to the wood profiles with staples.

**Hardware:** N/A

**Reinforcement:** None.

**Product Identification:** A certification program label (NAMI) will be affixed to the door. The certification program label includes the manufacturer's code name (**PWG-M-163**); product name: **Mira OS Fixed Door**; performance characteristics; the approved inspection agency (NAMI); and the applicable standard: AAMA/WDMA/CSA 101/I.S.2/A440-05 and ASTM E 1886 and ASTM E 1996.

**LIMITATIONS**

**Design pressures (DP):**

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
1	71	98 $\frac{1}{16}$	$\pm 50$

**Impact Resistance:** These door assemblies satisfy the Texas Department of Insurance's criteria for protection from windborne debris in the **Inland I** and **Seaward zone**. The door assemblies passed Missile Level D specified in ASTM E 1996-02/05. The door assemblies may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded. These door assemblies will not need to be protected with an impact protective system.

**Acceptance of Smaller Assemblies:** Doors assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

**INSTALLATION INSTRUCTIONS**

**General:** The door assembly shall be prepared and installed in accordance with the manufacturers recommended installation instructions. Detailed installation instructions and drawings are available from the manufacturer.

**Installation:** The door shall be fastened to minimum Southern Yellow Pine dimension lumber. The door is secured to the wall framing using the integral nailing fin at the head and side jambs of the door. The nailing fin shall be secured to the wall framing with minimum No. 8 screws. The fasteners shall be spaced approximately 2 inches from each corner and approximately 12 inches on center. The door is also secured to the wall framing at the head and the sill with minimum No. 8 screws through the frame of the door. The fasteners shall be spaced approximately 6 inches from each corner and approximately 24 inches on center. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing members. The sill is secured to the wall framing with silicone.

**Note:** The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.